

## No. XVIII.—PEARL BEARING MUSSELS.

Mr. Laird Macgregor recently forwarded the Society a small packet of Pearls produced by a species of Mussel found in a tank at Badas a few miles from Belgaum. Two examples of the Mussel were sent with the packet. Mr. Laird Macgregor wrote:—"I do not suppose the pearls are of any value, but is it not rather unusual to find pearl bearing mussels in fresh water?"

The mussels and pearls were sent to Mr. Hornell, Director of Fisheries, Madras, for investigation and Mr. Hornell has sent in the following interesting remarks in connection with them.

"The shells are of the common fresh-water mussel, probably *Lamellidens marginalis*. This species is often very abundant in fresh waterponds and streams and it is not uncommon for it to produce pearls. The quality is usually poor on account of the small size, poor lustre and frequent colouration. But when the mussels occur in large numbers and when they produce pearls freely, their collection is remunerative; such small pearls should fetch about Rs. 10 per tola weight and there is always the chance of finding a large pearl of fair lustre that may command a price of anything up to Rs. 50 or possibly even more. At Surada in Ganjam, fresh water Mussels producing pearls are so abundant that the villagers collect them for this purpose and their pearls are often to be had in the village bazaars. Similarly in Bengal there is a well-known Zemindari fishery for these Mussels farmed out, I believe, by the Zamindar for a considerable sum.

Curiously enough these Mussels vary greatly in their pearl-producing quality. In some localities, pearls are so seldom formed that collection of the Mussels is wholly unremunerative. This is due to the fact that the formation of pearls in these animals is due mainly to the presence of certain parasites. If these be absent, as in most localities, the Mussels produce few or no pearls; if they be numerous, we may then expect pearl production to be abundant.

The famous Scots pearls celebrated in the middle ages are produced by river-mussels closely related to those sent to me. As is well known these pearls are occasionally of considerable value. But they are distinguished by a pink tint which diminishes their market value. Those sent from Belgaum are similarly tinted. Several of these fresh-water pearl fisheries are still worked in the north of Scotland. Some Welsh streams also produce pearl-bearing Mussels.

In North American rivers, the fishery for fresh-water mussels is a big industry employing hundreds of workers and a large capital. But while pearls are occasionally found of some considerable value, this fishery is conducted primarily to obtain mother-of-pearl for the pearl button factories. These consume many tons of these fresh-water Mussel shells.

In India, this same industry has arisen in Bengal, where supplies of a species of *Lamellidens* are found in the rivers, sufficiently stout to permit of poor quality shirt-buttons being cut from the shell. I believe it might be worth while to examine the streams and large tanks throughout the Bombay Presidency in order to ascertain if any species exists here with shell sufficiently thick and in good abundance, for if there be, then further quantities might be cultivated and the material sold for button making.

Streams draining from or passing through a limestone region are the most likely to produce thick-shelled Mussels. Here in Madras, the streams are generally deficient in carbonate of lime and so our Mussels are almost wholly too thin shelled to be utilizable commercially."

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